

### Abstract of the Disclosure

A calling system based on a private network includes an outgoing call transmission unit, an outgoing call setting unit, and an incoming call reception unit. The outgoing call transmission unit receives a calling number, creates an outgoing call, and transmits the outgoing call to a gateway having a first IP address, which is the address of a relay of the private network, if a second IP address, which is the address of an exit of the private network, is allotted to a calling terminal. The outgoing call setting unit transmits a request for setting an outgoing call to the gateway, if the outgoing call transmission unit transmits the outgoing call to the gateway. The incoming call reception unit receives an incoming call from the gateway if the second IP address allotted to the calling terminal is an incoming internal private IP address, translated from an incoming internal public IP address.